

REMARKS/ARGUMENTS

The above amendments and the following remarks are in response to an Office Action mailed on April 15, 2004 and pertaining the to above-listed Application. In the Office Action, all of the pending Claims 1-7 were rejected under 35 U.S.C. §112 as being indefinite. Claims 1-7 were rejected under 35 U.S.C. §103(a) over EP 0 512 702 to Donner, et al. ("Donner") and U.S. Patent No. 5,101,353 to Lupien, et al. ("Lupien").

Rejections Under 35 U.S.C. §112

In the rejection under 35 U.S.C. §112, it was alleged that there is no element in Claim 1 that performs a "switch auction." In addition, Claim 1 was cited for lacking elements that relate the "means for matching offsetting risk positions" to "means for determining an auction price," "means for calculating relative risk positions" and "means for receiving financial instrument portfolios inputted by . . . traders."

For descriptive purposes, Applicant will point out portions of the specification and drawing which depict one, but not all of the means, listed in Claim 1. Therefore, the means described herein should not be considered limiting, but only as illustrating exemplary potential relationships between the means of Claim 1.

"Means for receiving financial instrument portfolios"

Receiving financial instrument portfolios includes obtaining information from the traders on the content of their portfolios. Each of the trader workstations 20 includes a trader module 70, as shown in Figure 3. Included in the trader module is a market interface module 74 which comprises one or more user interfaces for presenting information to the user, as described at page 20, lines 14-19. One of these user interfaces is the portfolio interface 380. The portfolio interface 380 includes an inputted column 382 representing the portfolio entered by the user wherein the positive and negative cash flow of each day (in millions "mm") as is illustrated in Figure 20 of the present application.

“Means for calculating relative risk positions . . . based on received financial instrument portfolios”

The means for calculating relative risk positions can include comparing recent trades to the positions received from the means for receiving financial instrument portfolios to get the net, real-time position of the user given the inputted portfolio and traded quantities, as shown in Figure 20. “With reference to the portfolio interface 380 of FIG. 20, an inputted column 382 represents the portfolio entered by the user, the traded column 384 is the cumulative amount traded by the user since the portfolio was entered in the inputted column 382. The net column 386 is the real-time position of the user given the portfolio inputted and the traded quantities in column 384. The user may restart at any time by rolling the net positions in net column 386 into the input column 382 by selecting the Roll button 388, or by clearing all the positions by selecting the Clear button 389.” *See* page 65, third paragraph of the present application.

“Means for determining an auction price”

Figure 31 of the present application illustrates one of the means for producing an auction price, in this case by finding the price at which the most volume of an instrument is available for trading. “The auction price is calculated by finding the price at which the most volume is traded. This condition is sufficient to generate a fair price, and all transactions should be completed at this price. It is noted that this price is generated without taking credit into account.” *See* page 69, last paragraph of the present application. Of course it should be noted that the “auction price” need not necessarily be constrained to the average price, but could be calculated in other ways including a mean price, a maximum price, a minimum price, the only price available, etc. The instruments used for calculating the auction price are supplied by the various traders participating in the system entering their positions, such as through the switch auction interface 460 shown in Figure 22B.

“Means for matching offsetting risk positions”

Figure 32 of the present application illustrates matching orders in an auction for one embodiment of the present invention. Matching occurs by matching the instruments that offset

the relative risk positions calculated by the means for calculating relative risk positions. Offsetting instruments having the same auction average price are automatically matched and a settlement list is generated (step 654) if no instruments remain unmatched (step 652). The remaining steps 656-674 include matching based on the volume and best price, as well as available credit. Note that offsetting risk positions can be matched but may not necessarily be executed by the present invention.

Claim 1 above has been amended to clarify the relationships between the different means cited therein. For example, Claim 1 has been amended to clarify that the financial instrument portfolios are obtained from the means for receiving financial instrument portfolios for use by the means for calculating relative risk positions and determining an auction price. Also, Claim 1 has been amended to clarify that the means for matching offsetting risk positions uses the relative risk positions and the auction price for matching. Applicant submits that these amendments, along with the above-listed descriptions of examples of the means of Claim 1, overcome the rejections of Claims 1-7 under 35 U.S.C. §112.

Rejections Under 35 U.S.C. §103(a)

I. Summary of the Cited References

Summary of Donner

Donner discloses an automated currency market trading system for matching bids and offers. The system includes a central computer 10 and a plurality of remote bank computers 14 each hosting a plurality of terminals 16, as shown in Figure 1 of Donner. Credit files reside on the bank computers and are used to filter bids and offers from the terminals to ensure that the source of the bid or offer has sufficient credit, as described at lines 55-58, page 2 of Donner. A credit controller 17 resides on the bank computers and is used to control communication of confidential credit data to ensure anonymity, as shown in Figure 1C of Donner. Bids and offers are forwarded by the bank computers to the central computer 10 for matching, as described at lines 13-15, page 7 of Donner.

Matching is performed by the system of Donner between bids and offers that are perfect firm matches. Imperfect matches are made for firm orders where the terms vary, but only with the permission of the traders. "If no perfect match is found for any particular order then an imperfect match is sought, block 60. . . . If an imperfect match is found, i.e., a match with parameter values within predefined tolerances, then the central computer will ask the trader who placed the order whether the order can be altered to match the imperfect match, block 62." See page 10, lines 9-20 of Donner. Similarly, for soft orders the trader is asked whether a trade can be completed with the imperfect match. See page 10, lines 21-29 of Donner.

Summary of Lupien

Lupien discloses a system wherein a formerly large, relatively static portfolio is manipulated (i.e., securities therein are sold and other securities are purchased) to take on risk in order to earn additional profits from spreads between offered prices and normal prices. For instance, Lupien's system calculates a "normal price" which is, "an estimate made of a security's current price and is calculated as an exponentially weighted average of recent trades and/or quotations adjusted for overall market movement," at column 9, lines 61-65.

Lupien states that the normal price, "differs from current market price as a function of trading activity in the security which pushes the current price to one side or another of its normal price," at column 9, lines 65-67. When the currently traded price is below the normal price the securities can be purchased. Conversely, when the normal price is below the currently traded price the securities can be sold. Ostensibly, this type of arbitrage will allow "incremental profits" to be gained on the sales, as described at column 4, lines 1-9 of Lupien.

Lupien suggests that the purchase and sale of securities to earn an incremental profit exposes the portfolio to greater risk and that the, "risk assumed is that, as compared to the core portfolio, the provision of liquidity results in the over or under-weighting of securities," column 4, lines 8-12. In particular, Lupien states that, "[t]o buy additional shares in one security, offset by a comparable sale of another security, subjects the portfolio to the risk that the over-weighted security will underperform the unaltered core portfolio, while the under-weighted security overperforms it," at column 4, lines 13-19. Lupien's system, therefore, unbalances the portfolio

when its attempts to earn a profit by trading portions of the portfolio and deviating incrementally from "portfolio objectives" that include a minimum amount of diversification or exposure to desired sectors or industries.

II. The Present Invention as Claimed

Claim 1 is the only independent claim of the present application. Each of Claims 2-7 depends from, and therefore recites, at least the same elements as Claim 1. Claim 1 recites a means for receiving financial instrument portfolios input by traders, such as a portfolio of interest rate agreements that obligate the portfolio holder to make payments or receive payments on a daily basis, as shown in Figure 20 of the present application. For example, in Figure 20, the portfolio holder is obligated to pay out 15 million in a particular currency on September 8 and receives a payment of 15 million on September 11. The means for calculating relative risk positions includes logic for determining the net risk position based on the inputted financial instrument portfolios. For example, in Figure 20 of the present application, the net position column is the net exposure of the trader due to the inputted portfolio and the traded position.

Claim 1 also recites a means for determining an auction price of the financial instrument portfolios, such as by finding a fair price using the most volume traded or using the three methods (Binary, Line Binary and Complex) described on page 38 of the present application. This fair price is used as a basis for matching the offsetting risk positions, such as by requiring each of the bids and offers to meet or exceed the fair price.

The means for matching the offsetting risk positions of Claim 1 finds risk positions that balance each other out and matches them based on some criteria, such as by automatically matching offsetting instruments with the same auction price, as described at step 652, Figure 32 of the present application. In addition, the means for matching the offsetting risk positions screens the potentially offsetting risk positions for credit availability, such as by use of the credit preference logic illustrated in Figure 11 of the present application.

III. Donner Fails to Teach or Disclose the Claimed Invention

Donner Fails to Disclose Auction Price Determination

Donner fails to disclose all of the elements of Claim 1. For example, Donner does not disclose a means for determining an auction price. Donner discloses entry and selection of different forward-rate-agreements and interest rate swaps at page 5, lines 21-36. As described above, matches between orders by the system of Donner must be either perfect matches, wherein the terms have been entered by the traders (including the price), or if imperfect matches, the adjusted terms of the order must be approved (such as a change in the price) by the trader before the match is made. *See* page 10, lines 9-29 of Donner. In contrast, the present invention as claimed includes auction mechanism for determining the auction price using the financial instrument portfolios, such as by finding the price at which the largest volume is traded. The prices of the matched bids and offers in Donner, on the other hand, are controlled by the trader, being either an exact match of the prices entered by the trader or resulting from a change directly approved by the trader, and are not determined by an auction mechanism.

Donner Fails to Disclose Calculating and Matching Offsetting Risk Positions

In addition, it does not appear that the system of Donner includes a means for calculating and matching offsetting risk positions. The system of Donner only matches bids and offers on single instruments based on an exact match of the terms as entered or approved by the traders. At no point does the system of Donner use the entered bids and offers to determine the risk of a portfolio of instruments, and any matching that occurs is only seeking an exact match for that instrument, not an instrument with an offsetting risk position as described at step 652, Figure 32 of the present application. For example, the system in Donner might match a bid for an instrument paying 4% with an offer of an instrument paying 4%. However, there is no calculation of the risk exposure with one or more instruments of a portfolio and a matching with a risk position that offsets the calculated risk exposure. At best, a trader using Donner would have to determine themselves the risk position of the financial instruments in their portfolio and then calculate what risk position they would have to purchase to offset the calculated risk, and

then enter the parameters of the offsetting risk position, for the system of Donner to be able to find a matching, offsetting risk position.

IV. Lupien Fails to Teach or Disclose the Claimed Invention

Lupien Fails to Disclose Matching Offsetting Risk Positions

Lupien also fails to disclose the present invention as described in Claim 1. Lupien receives information on portfolios, but with the purpose of modifying the portfolios to take on more risk, as opposed to finding offsetting risk positions of other portfolios for matching. For example, Lupien discloses calculation of a "normal price" of one of the securities in a portfolio of securities. This normal price is based on price paid for the security in a collection of previous trades. This normal price is then compared with current bids and offers to determine whether the available trades are overpriced or under priced.

Once the normal price for a security has been determined, Lupien teaches buying more of the security when the normal price is above the currently traded price and selling more of the security when the normal price is below the currently traded price. The purpose of the trades in Lupien, however, is not to offset a risk position but to deviate from a an ideal, core portfolio, by adding or reducing exposure in the real portfolio, in an effort to make additional profits off of such deviations. *See* Lupien, column 4, lines 1-9. As described by Lupien, such deviations actually serve to expose the portfolio to more risk in an effort to earn a profit. *See* Lupien, column 4, lines 13-19. The risks of the core portfolio in Lupien are therefore not being offset, but are being compounded by overexposure and under exposure in some securities in a deviation from a core portfolio. This is in contrast with the present invention as described in Claim 1, wherein the risk position of a portfolio is determined in an attempt to offset the risk position to reduce risk and move closer to a portfolio with reduced risk, not add risk in an attempt to earn additional profits.

V. Combination of Donner, Lupien Fail to Teach or Disclose Matching Offsetting Risk Positions

One of skill in the art would not be motivated to combine Donner with Lupien. Lupien teaches against offsetting risk positions by suggesting that additional profit can be made by deviating from the portfolio objective and taking on additional risk. Donner makes no suggestion that there is a need to calculate a risk position of a portfolio of financial instruments, or that there are benefits to basing trades in forward-rate-agreements or interest rate swaps on a risk position. Even if combined, Donner and Lupien at best would teach a system that would deviate from a portfolio objective and add more risk to the portfolio by the purchase of forward-rate-agreements and interest rate swaps that are trading at a discount to average prices with the intent of earning additional profit. None of the remaining references appears to overcome the failure of Donner and Lupien to teach or suggest the present invention as described in Claims 1-7 of the present application.

VI. Conclusion

Donner, Lupien, and the remaining cited references, alone and in combination, fail to teach or suggest Claim 1 of the present application which recites a means for matching offsetting risk positions of traders using the relative risk positions of their portfolios, auction prices determined from the portfolios, and credit preferences of the traders. Claim 1 should therefore be patentable and the rejection of Claim 1 under 35 U.S.C. §103(a) has been overcome. Each of the remaining Claims 2-7 depends from, and further patentably distinguishes, Claim 1. The rejections of Claim 2-7 under 35 U.S.C. §103(a) have been overcome and Claims 2-7 are also in a condition for allowance.

In view of the remarks and amendments presented above, it is respectfully submitted that claims of the present application are in condition for allowance. It is respectfully requested that a Notice of Allowance be issued in due course. The Examiner is requested to contact Applicants' undersigned attorney to resolve any remaining issues in order to expedite examination of the present application.

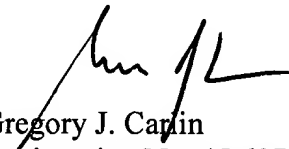
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It is not believed that extensions of time or fees for net addition of claims are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 CFR § 1.136(a), and any fee required therefore (including fees for net addition of claims) is hereby authorized to be charged to Deposit Account No. 16-0605.

Respectfully submitted,



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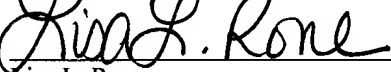
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